

DETAILED ACTION

Claim Objections

Claim 9 is objected to because of the following informalities: in line 6, “the brake lining” should be --the lining-- for consistency throughout the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4, 7, and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation “movable first and second brake plates that are configured to rotate relative to the brake lining”. It is unclear exactly which of the first/second brake plates and the brake lining actually rotates to cause relative rotation, thereby rendering the scope of the claims indefinite. On page 5, lines 9-11 of the originally filed specification, it is disclosed that “the rotor 40 rotates with the output shaft and elevator sheave (not shown), while the armature plates 34, 35 (and brake plates 42, 43, if separate) rotationally remain relatively stationary”. Therefore, the Examiner assumes that only the brake lining rotates while the first/second brake plates remain

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rotationally stationary, thereby resulting in relative rotation between the first/second brake plates and the brake lining.

Claim 9 is rejected for the same reasons as set forth above for claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

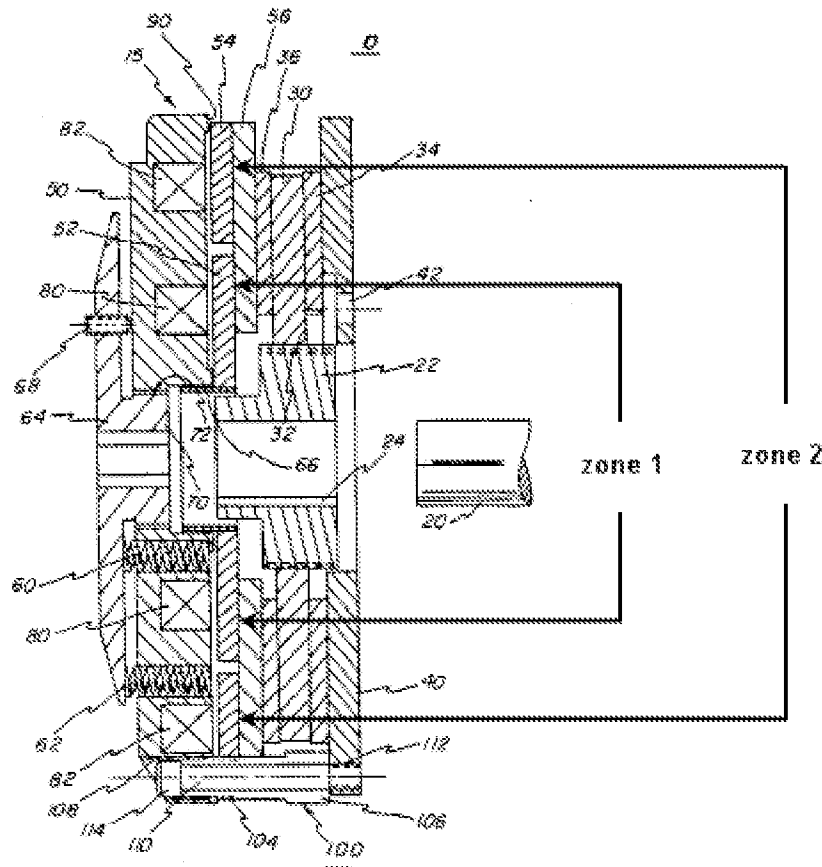
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5057728 (Dammeyer et al.) in view of U.S. Patent No. 5699883 (Albrecht).

Regarding claim 1, Dammeyer et al. disclose a brake (capable of use with an elevator), comprising: a rotor (30) having a brake lining (56 and 36) on one side of the rotor (left side as viewed in Fig. 3); and movable first and second brake plates (52, 54), wherein each of the first and second brake plates is independently actuatable (column 3, line 46 - column 4, line 20) into engagement with a respective one of two zones of the lining (see figure below; the Examiner submits that the two zones of the lining are annular and concentric), wherein the first and second brake plates have generally semi-annular braking surfaces (the Examiner submits that each of the first and second brake plates 52, 54 has two semi-annular braking surfaces) that respectively oppose the two zones of the lining on the one side of the rotor (see figure below), and wherein the two

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zones of the lining of the rotor are annular and concentric (see Figs. 1 and 2 and figure below).



Regarding claim 1, Dammeyer et al. do not disclose expressly that the first and second brake plates (52, 54) are configured to rotate relative to the brake lining (56 and 36) (as best understood, see 112 rejection above). The Examiner submits that this deficiency is due to the brake lining (56 and 36) being separate from the rotor (30) (which rotates relative to the first and second brake plates 52, 54).

Albrecht teaches a brake in which a brake lining (57) can be either separate from or integral with a rotor (31) (the brake lining 57 being separate from the rotor 31 when

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the brake lining 57 is mounted to an armature/brake plate 45; the brake lining 57 being integral with the rotor 31 when the braking lining 57 is mounted to the rotor 31). See column 3, lines 4-5.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the brake lining as taught by Dammeyer et al. so that it is integral with the rotor as taught by Albrecht (and thus, the brake lining would rotate relative to the first and second brake plates). The motivation for doing so would have been to merely provide an alternate arrangement for the brake lining, since it is not critical for the brake lining to be separate from the rotor, as evidenced by Albrecht (column 3, lines 4-5). Furthermore, having the brake lining integral with the rotor could reduce the overall number of parts, thereby facilitating assembly/disassembly, as is well-known to those of ordinary skill in the art. Also, see MPEP 2144.04 (V) (B).

Regarding claim 2, see stationary housing 40 and column 3, lines 31-37 of Dammeyer et al.

Regarding claim 3, see rear brake lining 34 and column 3, lines 31-37 of Dammeyer et al.

Regarding claim 4, see first and second springs 60, 62 and independently actuatable first and second electromagnets 80, 82 of Dammeyer et al.

Regarding claim 7, see Fig. 1 of Dammeyer et al. and portions 36 (four portions 36 are shown) that are not integral with one another, each portion 36 being disposed on a different one of the concentric annular zones (see figure above; the Examiner submits

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that top portion 36, as viewed in the figure above, is disposed on zone 1 and bottom portion 36, as viewed in the figure above, is disposed on zone 2).

Regarding claim 9, the claim is rejected for at least the same reasons as set forth above.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VU Q. NGUYEN whose telephone number is (571) 272-7921. The examiner can normally be reached on Monday through Friday, 11:30 AM to 8:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. Q. N./
Examiner, Art Unit 3657

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